#### REMARKS

The Office Action of November 1, 2006, has been received and reviewed.

Claims 1-63 were previously pending in the above-referenced application. Claims 1-25 had been considered, while claims 26-63 were withdrawn from consideration.

Claims 1-12, 14-17, 21, 22, 24, and 25 have been considered and stand rejected. Claims 11-13, 18-20, and 23 are drawn to allowable subject matter.

Claims 26-63 have been canceled without prejudice or disclaimer. New claims 64-117 have been added.

Reconsideration of the above-referenced application is respectfully requested.

## Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 7 and 9-12 stand rejected under 35 U.S.C. § 112, second paragraph, for reciting subject matter that is purportedly indefinite.

With respect to the rejection of claim 7, it is respectfully that one of ordinary skill in the art would readily understand, as the Examiner has, the subject matter recited therein.

Specifically, claim 7 is drawn to an apparatus that includes a diffraction grating in a planar surface of a substrate, an adjacent surface of a waveguide film, or in both of these surfaces.

As for the rejections of claims 9-12, the term "precise" has been removed from claims 9 and 12, broadening the scope of each of claims 9-12.

It is respectfully submitted that each of claims 7 and 9-12 complies with the definiteness requirement of the second paragraph of 35 U.S.C. § 112, and requested that the 35 U.S.C. § 112, second paragraph, rejections of each of these claims be withdrawn.

# Rejections under 35 U.S.C. § 102(b) and § 102(e)

Claims 1-10, 14-17, 21, 22, 24, and 25 have been rejected under 35 U.S.C. § 102.

A claim is anticipated only if each and every element, as set forth in the claim, is found, either expressly or inherently described, in a single reference which qualifies as prior art under

35 U.S.C. § 102. Verdegaal Brothers v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

#### <u>Tiefenthaler</u>

Claims 1-5, 7, 8, 15-17, 21, 22, 24, and 25 are rejected under 35 U.S.C. § 102(b) for reciting subject matter which is purportedly anticipated by the subject matter described in U.S. Patent 5,071,248 to Tiefenthaler et al. (hereinafter "Tiefenthaler").

Tiefenthaler describes one embodiment of a so-called "thin-film" waveguide with a detector D1, D3, D4 positioned at an edge of a substrate 2 and waveguiding layer 1. FIGs. 2 and 4. Another embodiment of thin-film waveguide described in Tiefenthaler includes a detector that is positioned to collect radiation that is emitted from a surface of the substrate 2. FIG. 3; col. 7, line 53, to col. 8, line 15.

It is respectfully submitted that Tiefenthaler does not expressly or inherently describe "a light detection device positioned to collect light emitted from a surface of [the] waveguide film," as would be required for Tiefenthaler to anticipate each and every element of independent claim 1. As such, under 35 U.S.C. § 102(b), the subject matter to which independent claim 1 is directed is allowable over the apparatus described in Tiefenthaler.

Claims 2-5, 7-8, 15-17, 21-22, and 24-25 are each allowable, among other reasons, for depending directly or indirectly from independent claim 1, which is allowable.

#### Flanagan

Claims 1-10, 14, 15, 17, 21, 22, 24, and 25 have been rejected under 35 U.S.C. § 102(b) for being drawn to subject matter that is allegedly anticipated by the subject matter described in U.S. Patent 5,081,012 to Flanagan et al. (hereinafter "Flanagan").

As shown in FIG. 10 of Flanagan, the disclosure of Flanagan is limited to a system in which a detector 98 is positioned so as to sense light that is emitted from the surface of a substrate 95, not from the surface of a waveguiding film 94.

Thus, like Tiefenthaler, Flanagan lacks any express or inherent description of "a light detection device positioned to collect light emitted from a surface of [the] waveguide film," as would be required for Flanagan to anticipate each and every element of independent claim 1. As such, under 35 U.S.C. § 102(b), the subject matter to which independent claim 1 is drawn is allowable over the apparatus described in Flanagan.

Each of claims 2-10, 14, 15, 17, 21, 22, 24, and 25 is allowable, among other reasons, for depending directly or indirectly from independent claim 1, which is allowable.

### **Attridge**

Claims 1-4, 8, 14, 15, 21, 22, 24, and 25 stand rejected under 35 U.S.C. § 102(e) for being directed to subject matter that is assertedly anticipated by the disclosure of U.S. Patent 5,344,784 to Attridge (hereinafter "Attridge").

As shown in FIG. 1 of Attridge, a cone 13 of fluorescent light emitted from the surface of a substrate 2, not from the surface of a waveguiding layer 5, is detected. *See also*, col. 5, lines 11-20.

Attridge provides no express or inherent description of an apparatus in which fluorescent light that is emitted from the surface of the waveguiding layer 5 is detected. Therefore, Attridge does not anticipate each and every element of independent claim 1, as would be required to maintain the 35 U.S.C. § 102(e) rejection of independent claim 1.

Claims 2-4, 8, 14, 15, 21, 22, 24, and 25 are each allowable, among other reasons, for depending directly or indirectly from independent claim 1, which is allowable.

It is respectfully requested that the 35 U.S.C. § 102 rejections of claims 1-10, 14-17, 21, 22, 24, and 25 be withdrawn, and that each of these claims be allowed.

### Allowable Subject Matter / New Claims

The indication that claims 11-13, 18-20, and 23 are drawn to allowable subject matter is gratefully acknowledged.

All of the elements of claim 11 have been incorporated into new independent claim 64, new independent claim 83 recites all of the limitations of claim 19, and new independent claim 103 is drawn to an apparatus that includes all of the features of claim 23.

New claims 65-82 depend directly or indirectly from new independent claim 64. New claims 84-102 depend directly or indirectly from new independent claim 83. Each of new claims 104-117 depends directly or indirectly from new independent claim 103.

It is respectfully submitted that none of new claims 65-117 introduces new matter into the above-referenced application.

#### **CONCLUSION**

It is respectfully submitted that each of claims 1-25 and 64-117 is allowable. An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the above-referenced application has been passed for issuance. If any issues preventing allowance of the above-referenced application remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,

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